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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/810,646	03/03/1997	JEFFREY JACOBSEN	KPN96-03A2	9183

21005 7590 10/22/2003

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
530 VIRGINIA ROAD
P.O. BOX 9133
CONCORD, MA 01742-9133

EXAMINER	
PIZIALI, JEFFREY J	

ART UNIT	PAPER NUMBER
2673	

DATE MAILED: 10/22/2003

29

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	08/810,646	JACOBSEN ET AL.	
	Examiner	Art Unit	
	Jeff Piziali	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 March 1997* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-44 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of copending Application No. 08/766,607. Although the conflicting claims are not identical, they are not patentably distinct from each other because Application No. 08/766,607 (like the pending application) claims a docking system for a telephone, comprising a housing having a plurality of control elements and a connection port that electrically connects a circuit within the housing to a wireless telephone that docks with the housing; an active matrix liquid crystal display mounted to the housing, the display receiving display data from the circuit; and a light source within the housing that illuminates the display (see claim 1).

Application No. 08/766,607 does not claim "a color sequential display circuit coupled to the matrix display and the control circuit" (as found in pending claim 5). However, color sequential display circuits were well known and commonly used in the field of LCD operation at

the time of invention. Therefore, it would have been obvious to an artisan at the time of invention to use a color sequential display circuit, so as to provide color image display.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilska et al. (United Kingdom - 2,289,555) in view of Takahara et al. (US 5,436,635).

Regarding claim 1, Wilska discloses a docking system for a telephone [17] comprising: a hand held housing [1] (see Figures 1-3; Page 5, Paragraph 3) having a plurality of control elements [10, 11] (see Figure 3; Page 4, Paragraph 3) and a connection port [8] (see Figure 3; Page 5, Paragraph 3) that electrically connects a control circuit [2] (see Figure 3; Page 3, Paragraph 9) within the housing [1] to a wireless telephone [17] that docks with the housing [1], the control circuit receiving image data from the telephone, and generating display data based on image data (see Figures 1-3; Page 5, Paragraph 3); a liquid crystal display [9] mounted to the housing [1] (see Figures 1-2; Page 4, Paragraph 2), the display receiving the display data from the control circuit [2], and presenting the display data as an image (see Figure 3; Page 3,

Paragraph 9). Wilska does not expressly disclose an active matrix LCD, a light source, or a power management circuit.

However, Takahara discloses an active matrix liquid crystal display (see Column 33, Lines 22-28), a light source [Fig. 21, 211] mounted in a display housing [Fig. 21, 201] that illuminates the image presented on the LCD [Fig. 21, 214] (see Column 28, Lines 30-49), and a power management circuit [Fig. 22, 223] that lowers the power consumption of the control circuit [Fig. 22, 225] after the image is illuminated until display data [Fig. 22, 'video signal'] for the next image from the control circuit is ready to be presented to the matrix display [Fig. 22, 214], the power consumption of the control circuit being lowered between sequentially generated display data (see Column 31, Lines 16-63). Wilska and Takahara are analogous art because they are from the shared field of handheld display devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's active matrix LCD, light source, and power management circuit with Wilska's communication device, so as to provide a high quality, energy efficient, liquid crystal image that's easy to see (and read) in both dark and bright light.

Regarding claims 2 and 3, neither Wilska nor Takahara expressly disclose a first display port and a second display port. However video line splitters, which provide plural display ports, are well known in the art of display devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize a video line splitter with the combined Wilska and Takahara communication device so as to display images on multiple display devices.

Regarding claim 4, Wilska does not expressly disclose the matrix display further comprises an array of transistor circuits formed with single crystal silicon, the array of transistor circuits being bonded to an optically transmissive substrate with an adhesive layer. However, Takahara discloses a transistor circuit array [Fig. 18A, 163] formed with single crystal silicon [Fig. 18A, 167c] bonded to an optically transmissive substrate [Fig. 18A, 162] with an adhesive layer [Fig. 18A, 167 a & 167b] (see Column 24, Line 44 - Column 25, Line 59). Therefore, it would have been obvious to an artisan at the time of invention to use Takahara's transistor circuit array as Wilska's LCD so as to reduce extraneous light reflectance.

Regarding claim 5 and 34, Wilska does not expressly disclose a color sequential display circuit. However, Takahara discloses a color sequential display circuit (see Fig. 15; Column 23, Lines 12-37). Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's color sequential display circuit with Wilska's communication device so as to provide a high quality color liquid crystal image.

Regarding claims 6 and 28, Wilska does not expressly disclose the display is a color sequential display system and the light source is an LED backlight. However, Takahara discloses an active matrix liquid crystal display is a color sequential display system (see Fig. 15; Column 23, Lines 12-37) and the light source is an LED backlight [Fig. 21, 211] (see Column 30, Lines 1-18). Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's color sequential display circuit and LED backlight

with Wilska's communication device so as to provide a high quality color liquid crystal image that's easy to see (and read) even in the dark.

Regarding claim 7, Wilska does not expressly disclose a timing circuit. However, Takahara discloses a timing circuit (see Column 6, Line 52 - Column 7, Line 12). Therefore, it would have been obvious to an artisan at the time of invention to use Takahara's timing circuit with Wilska's LCD so as to regulate driving-signal flow to the display.

Regarding claims 8 and 31, Wilska discloses a battery [3] (see Figure 3) carried by the housing.

Regarding claim 9, Wilska does not expressly disclose an LED light source that is optically coupled to the display and a lens that magnifies the image presented on the display. However, Takahara discloses an LED light source [Fig. 21, 211] (see Column 30, Lines 1-18) optically coupled to a display [Fig. 21, 214] and a lens [Fig. 21, 216] that magnifies an image on the display (see Column 28, Lines 30-49). Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's LED light source and magnifying lens assembly with Wilska's communication device, so as to provide a high quality liquid crystal image that's easy to see (and read) in both dark and bright light.

Regarding claims 10 and 27, Wilska does not expressly disclose using an LED light source as a backlight. However, Takahara discloses using an LED light source [Fig. 21, 211] as

a backlight (see Column 30, Lines 1-18). Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's LED backlight with Wilska's communication device so as to provide a high quality color liquid crystal image that's easy to see (and read) even in the dark.

Regarding claim 11, Wilska does not expressly disclose a side illumination device. However, Takahara discloses a side illumination device [Fig. 21, 211] (see Column 28, Lines 30-49 and Column 30, Lines 1-18). Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's side illumination device with Wilska's LCD, so as to provide a display that's easy to see (and read) in the dark.

Regarding claims 12, 25 and 39, these claims are rejected by the reasoning applied in the above rejection of claim 9; furthermore, Wilska discloses a display subhousing, wherein the display subhousing can be moved from a storage position to an operating position (see Figures 7-9; Page 10, Paragraph 3).

Regarding claim 13, Wilska discloses a lens is moved from within the housing in the storage position and is viewable in the operating position (see Figures 7-9; Page 10, Paragraph 3).

Regarding claim 14, Wilska discloses the display subhousing rotates relative to the housing between the storage position and the operating position (see Figures 7-9; Page 10, Paragraph 3)..

Regarding claim 15, Wilska discloses the display subhousing translates relative to the housing between the storage position and the operating position (see Figures 7-9; Page 10, Paragraph 3)..

Regarding claim 16, Wilska discloses the display both rotates and moves translationally relative to the housing between a storage position and an operating position (see Figures 7-9; Page 10, Paragraph 3)..

Regarding claim 17, Wilska discloses a display subhousing module, wherein the display subhousing is detachable from the housing (see Figure 7; Page 10, Paragraph 3)..

Regarding claim 18, neither Wilska nor Takahara expressly disclose at least two display module ports, each port is adapted to couple with the display subhousing both electrically and physically. However video line splitters, which provide plural display ports, are well known in the art of display devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize a video line splitter with the combined Wilska and Takahara communication device to display images on multiple display devices.

Regarding claims 19, 26, 32 and 40, Wilska discloses a camera [15, 16] (see Figures 1-3; Page 4, Paragraph 5).

Regarding claims 20 and 29, Wilska does not expressly disclose an array of at least 640 x 480 pixel electrodes. However, Wilska does disclose providing a resolution greater than 640 x 200 pixels^2 (see Page 4, Paragraph 2). Therefore, for the purpose of providing a precise display image, it would have been obvious to an artisan at the time of invention to utilize 640 x 480 pixel electrodes.

Regarding claim 21, this claim is rejected by the reasoning applied in the above rejection of claim 1; furthermore, Wilska discloses a docking system for a telephone [17] comprising: a hand held housing [1] (see Figures 1-3; Page 5, Paragraph 3) having a plurality of control elements [10, 11] (see Figure 3; Page 4, Paragraph 3) and a connection port [8] (see Figure 3; Page 5, Paragraph 3) that links a control circuit [2] (see Figure 3; Page 3, Paragraph 9) within the housing to a telephone attachable to the housing (see Figures 1-3; Page 5, Paragraph 3); a liquid crystal display [9] mounted to the housing and connected to the display control circuit (see Figures 1-2; Page 4, Paragraph 2), the display receiving display data from the circuit (see Figure 3; Page 3, Paragraph 9); and a battery in the housing that provides power to the device. Wilska does not expressly disclose an active matrix LCD, a light source, or a power management circuit.

However, Takahara discloses an active matrix liquid crystal display (see Column 33, Lines 22-28), a light source [Fig. 21, 211] positioned in a display housing [Fig. 21, 201] that illuminates the LCD [Fig. 21, 214] (see Column 28, Lines 30-49), and a power management

circuit [Fig. 22, 223] that lowers the power consumption of the control circuit [Fig. 22, 225] after the image is illuminated until display data [Fig. 22, 'video signal'] for the next image from the control circuit is ready to be presented to the matrix display [Fig. 22, 214], the power consumption of the control circuit being lowered between sequentially generated display data (see Column 31, Lines 16-63). Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's active matrix LCD, light source, and power management circuit with Wilska's communication device, so as to provide a high quality, energy efficient, liquid crystal image that's easy to see (and read) in both dark and bright light.

Regarding claims 22 and 36, Wilska discloses the connection port [8] electrically connects the control circuit [2] to the telephone [17] attached to the housing [1] (see Figures 1-3; Page 5, Paragraph 3).

Regarding claims 23 and 37, Wilska does not expressly disclose the system has both a low resolution alphanumeric display and a high resolution display. However, Wilska does disclose providing a resolution of 640 x 200 pixels^2 and greater (see Page 4, Paragraph 2). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize resolutions of 640 x 200 pixels^2 and greater with Wilska's display so as to provide precise display of images.

Regarding claims 24 and 38, Wilska discloses the display control circuit mounted in the housing is a central processing unit [4] (see Figure 1; Page 4, Paragraph 9).

Regarding claim 30, this claim is rejected by the reasoning applied in the above rejection of claim 1; furthermore, Wilska discloses a method of displaying an image on a docking system in conjunction with a wireless telephone [17], comprising linking an external port [17] of the telephone with a connection port [8] of a docking station of the docking system to dock the telephone with the docking station and to provide a communication link between the telephone and the docking station, the telephone having a transceiver capable of receiving audio and image data (see Figures 1-3; Page 5, Paragraph 3); and operating a display control circuit [2] (see Figure 3; Page 3, Paragraph 9) of the docking station, the control circuit being connected to the transceiver and a matrix liquid crystal display [9] of the docking station through the communication link, the operating generating an image on the display (see Figures 1-2; Page 4, Paragraph 2). Wilska does not expressly disclose an active matrix LCD, illuminating the image presented on the display, or operating a power management circuit.

Takahara discloses an active matrix liquid crystal display (see Column 33, Lines 22-28), a light source [Fig. 21, 211] positioned in a display housing [Fig. 21, 201] that illuminates the LCD [Fig. 21, 214] (see Column 28, Lines 30-49), and a power management circuit [Fig. 22, 223] that lowers the power consumption of the control circuit [Fig. 22, 225] after the image is illuminated until display data [Fig. 22, 'video signal'] for the next image from the control circuit is ready to be presented to the matrix display [Fig. 22, 214], the power consumption of the control circuit being lowered between sequentially generated display data (see Column 31, Lines 16-63). Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's active matrix LCD, light source, and power management

circuit with Wilska's communication device, so as to provide a high quality, energy efficient, liquid crystal image that's easy to see (and read) in both dark and bright light.

Regarding claim 33, Wilska discloses selecting whether the image from the camera is seen on the display, transmitted to remote location, or both (see Figures 1-3; Page 5, Paragraph 1).

Regarding claim 35, this claim is rejected by the reasoning applied in the above rejection of claim 1; furthermore, Wilska discloses a docking system for a telephone [17] comprising: a hand held housing [1] (see Figures 1-3; Page 5, Paragraph 3) having a plurality of control elements [10, 11] (see Figure 3; Page 4, Paragraph 3) and a connection port [8] (see Figure 3; Page 5, Paragraph 3) that links a display control circuit [2] (see Figure 3; Page 3, Paragraph 9) within the housing to a telephone attachable to the housing; a liquid crystal display mounted to the housing and connected to the control circuit (see Figures 1-2; Page 4, Paragraph 2), the display receiving display data from the circuit (see Figure 3; Page 3, Paragraph 9); and a battery [3] in the housing that provides power to the display and the light source (see Figure 3). Wilska does not expressly disclose a color sequential active matrix LCD, a light emitting diode within the hand held housing that illuminates the display, or a power management circuit

However, Takahara discloses an active matrix liquid crystal display is a color sequential display system (see Fig. 15; Column 23, Lines 12-37), the light source is an LED backlight [Fig. 21, 211] (see Column 30, Lines 1-18), and a power management circuit [Fig. 22, 223] that lowers the power consumption of the control circuit [Fig. 22, 225] after the image is illuminated

until display data [Fig. 22, 'video signal'] for the next image from the control circuit is ready to be presented to the matrix display [Fig. 22, 214], the power consumption of the control circuit being lowered between sequentially generated display data (see Column 31, Lines 16-63). Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's color sequential display circuit, LED backlight, and power management circuit with Wilska's communication device so as to provide a high quality, energy efficient, color liquid crystal image that's easy to see (and read) even in the dark.

Regarding claims 41-43, Wilska discloses an array of at least 75,000 pixel electrodes (see Page 4, Paragraph 2). Wilska does not expressly disclose the LCD having an active area of less than $158mm^2$. However, Wilska's does disclose variable LCD dimensions (see Page 4, Paragraph 2). Therefore, it would have been obvious to an artisan at the time of invention to utilize a smaller display area (such as $158mm^2$ for instance) so as to conserve overall system size and weight.

Regarding claim 44, this claim is rejected under the reasoning applied in the above rejection of claims 41-43; furthermore while Wilska does not expressly disclose an array of at least 640 x 480 pixel electrodes, Wilska does disclose providing a resolution greater than 640 x 200 $pixels^2$ (see Page 4, Paragraph 2). Therefore, for the purpose of providing a precise display image, it would have been obvious to an artisan at the time of invention to utilize 640 x 480 pixel electrodes.

Response to Arguments

5. Applicants' arguments filed 29 July 2003 have been fully considered but they are not persuasive. The applicants contend the cited prior art does not teach a power management circuit that lowers the power consumption of the control circuit after the image is illuminated until display data for the next image from the control circuit is ready to be presented to the matrix display, the power consumption of the control circuit being lowered between sequentially generated display data. However, the examiner respectfully disagrees. Takahara et al. (US 5,436,635) discloses a power management circuit [Fig. 22, 223] that lowers the power consumption of the control circuit [Fig. 22, 225] after the image is illuminated until display data [Fig. 22, 'video signal'] for the next image from the control circuit is ready to be presented to the matrix display [Fig. 22, 214], the power consumption of the control circuit being lowered between sequentially generated display data (see Column 31, Lines 16-63). Takahara's power management circuit modulates the anode voltage with a pulse signal of 60 Hz (see Column 31, Lines 32-35). Thereby, power consumption is lowered between sequentially generated display data pulses (as pulse amplitude must inherently drop from high-to-low to constitute a pulse signal). By such reasoning, rejection of the claims is deemed proper and thereby maintained.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (703) 305-8382. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

J.P.
14 October 2003

BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600